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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/065,860      | 11/26/2002  | Louis Andrew Schick  | RD27507-1           | 3383             |

6147 7590 06/08/2004

GENERAL ELECTRIC COMPANY  
GLOBAL RESEARCH  
PATENT DOCKET RM. BLDG. K1-4A59  
SCHENECTADY, NY 12301-0008

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| EXAMINER |
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RODRIGUEZ, PAUL L

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

2125

DATE MAILED: 06/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/065,860

Applicant(s)

SCHICK ET AL.

Examiner

Paul L Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 January 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/26/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

1. Claims 1-20 are presented for examination.

***Drawings***

2. The drawings were received on 1/7/03. These drawings are acceptable for examination purposes but are also objected to.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "406" has been used to designate both "Select and Run Scenario Set" and "Select Plant" in figure 4. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: 410. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement

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sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

5. The disclosure is objected to because of the following informalities:

Paragraph 35 line 5 states "...inspection is should be..." awkward language.

Paragraph 35 line 10 states "...may to present the..." awkward language.

Appropriate correction is required.

6. The use of the trademarks NETSCAPE, INTERNET EXPLORER and EXCEL have been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

***Claim Objections***

7. Claims 8, 9, 18 and 19 are objected to because of the following informalities:

Claim 8 line 2 refers to "the value", which is a positive recitation of the limitation (similar to using the word "said"), because it is the first use of the term it would be better stated as "a value". Could create an antecedent problem in the claim.

Claim 8 line 3, recites “(NPI)”, could be considered indefinite because it is unclear whether the phrase contained in the parenthesis is part of the claimed subject matter or not. It is understood that the claim is simply defining an acronym however that acronym is not later claimed and therefore could be eliminated.

Claim 8 line 3 refers to “the cost”, which is a positive recitation of the limitation, would be better as “a cost”, could create an antecedent problem in the claim.

Claim 9 line 2 refers to “the value”, which is a positive recitation of the limitation, would be better as “a value”, could create an antecedent problem in the claim.

Claim 9 line 3, recites “(CMU)”, could be considered indefinite because it is unclear whether the phrase contained in the parenthesis is part of the claimed subject matter or not.

Claim 9 line 4 refers to “the cost”, which is a positive recitation of the limitation, would be better as “a cost”, could create an antecedent problem in the claim.

Claim 18 line 2 refers to “the value”, which is a positive recitation of the limitation, would be better as “a value”, could create an antecedent problem in the claim.

Claim 18 line 3, recites “(NPI)”, could be considered indefinite because it is unclear whether the phrase contained in the parenthesis is part of the claimed subject matter or not.

Claim 18 line 4 refers to “the cost”, which is a positive recitation of the limitation, would be better as “a cost”, could create an antecedent problem in the claim.

Claim 19 line 2 refers to “the value”, which is a positive recitation of the limitation, would be better as “a value”, could create an antecedent problem in the claim.

Claim 19 line 3, recites “(CMU)”, could be considered indefinite because it is unclear whether the phrase contained in the parenthesis is part of the claimed subject matter or not.

Claim 19 line 4 refers to "the cost", which is a positive recitation of the limitation, would be better as "a cost", could create an antecedent problem in the claim.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Nichols et al (U.S. Pat 5,347,466). The claimed invention reads on Nichols et al as follows:

Nichols et al discloses a method for analyzing operational performance of industrial power plant machinery (col. 1 lines 6-24, col. 2 line 19 – col. 3 line 2) and a simulation tool (figure 2) the method and simulation tool comprising a user interface (figure 2) receiving an input configuration for a power plant to be analyzed (col. 5 lines 36-38, col. 6 lines 31-61, col. 8 lines 17-22), receiving inputted power plant operational information (col. 5 lines 39-41, col. 6 lines 62-64, col. 7 lines 60-68, col. 10 lines 8-14), a simulation engine (reference number 100) running a simulated power plant operation for a specified period of time based upon said power plant input configuration and said inputted power plant operational information (col. 5 line 55 – col. 6 line 30, col. 17 lines 16-24), and outputting simulated results of said simulated power plant operation in accordance with selected economic parameters of said power plant (col. 5 lines 44-49, col. 10 lines 66-68). Examiner would like to point out that any reference to specific figures,

columns and lines should not be considered limiting in any way, the entire reference is considered to provide disclosure relating to the claimed invention.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 2-6, 8-10, 12-16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols et al (U.S. Pat 5,347,466) in view of Hayashi et al (U.S. Pub 2002/0120412).

Nichols et al teaches most all of the instant invention as applied to claims 1 and 11 above and also teaches (claim 3, 13) wherein said inputted power plant operational information includes dynamic inputs, fixed inputs and contract constraints (col. 6 lines 18-30), (claim 5, 15) wherein said input configuration for a power plant to be analyzed is based upon a selected power

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plant configuration from a menu (col. 11 lines 1-16), (claim 6, 16) further comprising determining an operational profile of said power plant, said operational profile being determined in accordance with user inputted operational rules (col. 6 lines 65 – col. 7 line 3), (claim 8, 18) further comprising using said simulated results of said simulated power plant operation to evaluate the value of new product introduction with respect to additional performance thereof versus the cost thereof (col. 2 line 53 – col. 3 line 2), (claim 9, 19) further comprising using said simulated results of said simulated power plant operation to evaluate the value of conversion, modification and upgrade of components with respect to additional performance thereof versus the cost thereof (col. 2 line 53 – col. 3 line 2).

Nichols et al fails to teach wherein said input configuration and said inputted power plant operational information is received through a web-based user interface, wherein said selected economic parameters of said power plant include parts cost, parts life and parts performance and using said simulated results of said simulated power plant operation for evaluating a trade-off analysis of component life to performance.

Hayashi et al teaches a system for evaluating power plants for operational and maintenance cost determinations and also teaches wherein the input configuration and power plant operational information is received through a web-based user interface (figure 1, 3, paragraphs 8, 9), wherein said selected economic parameters of said power plant include parts cost, parts life and parts performance (paragraph 11-13) and using said simulated results of said simulated power plant operation for evaluating a trade-off analysis of component life to performance (paragraphs 11-13, 67-74, 82, 83).



Nichols et al and Hayashi et al are analogous art because they are both related to analyzing power plants.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the web-based user interface of Hayashi et al in the system and method for simulating and analyzing of Nichols et al because Hayashi et al teaches calculating a cost of economical loss caused by a power generation efficiency reductions, preparing operational and maintenance plans for the respective power generation units in real time and total cost for the operation and maintenance can be reduced (paragraphs 9-16).

12. Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols et al (U.S. Pat 5,347,466) in view of Hayashi et al (U.S. Pub 2002/0120412) as applied to claims 2 and 12 above, and further in view of Eastman et al (U.S. Pat 6,226,597).

Nichols et al as modified by Hayashi et al teaches a system and method for analyzing operational performance of a power plant as recited in claims 2 and 12 for the reasons above, differing from the invention as recited in claims 7 and 17 in that their combined teaching lacks updating an inspection plan, determining from said updated inspection plan, whether an inspection is required, and if an inspection is required, then placing said power plant into an inspection mode in which said power plant is unavailable during said simulated power plant operation for a period of time coinciding with an actual inspection.

Eastman et al teaches updating an inspection plan, determining from said updated inspection plan, whether an inspection is required, and if an inspection is required, then placing said power plant into an inspection mode in which said power plant is unavailable during said

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simulated power plant operation for a period of time coinciding with an actual inspection (col. 6 lines 47-61).

Nichols et al as modified by Hayashi et al and Eastman et al are analogous art because they are both related to power plant simulation.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the inspection program of Eastman et al in the system and method for simulating and analyzing of Nichols et al as modified by Hayashi et al because Eastman et al teaches a system that evaluates potential design changes for evaluating the effectiveness of various retrofit scenarios and accurately defines inspection criteria and retirement limits, which maintain the desired failure occurrence rate and maximizing the utilization of hardware (col. 7 lines 26-45).

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Soudier (U.S. Pub 2002/0193978) – teaches simulating the performance of a power system in a web-based environment.

Christensen et al (U.S. Pub 2002/0156662) – teaches a web-based system for evaluating a power plant upgrade packages.

Chan et al (U.S. Pub 2002/0123870) – teaches a web-based system for analyzing the performance of a power plant.

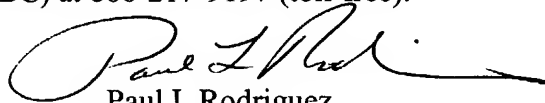
Ishii et al (U.S. Pat 6,671,647) – teaches an Internet based system that simulates a life of power plant components.

Maguire, Jr. et al (U.S. Pat 5,331,579) – teaches a system that models and simulates a power plant.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul L Rodriguez whose telephone number is (703) 305-7399. The examiner can normally be reached on 6:00 - 4:30 T-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P Picard can be reached on (703) 308-0538. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul L Rodriguez  
Examiner  
Art Unit 2125

PLR  
6/4/04